


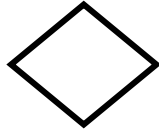
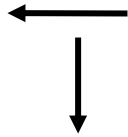




Questions

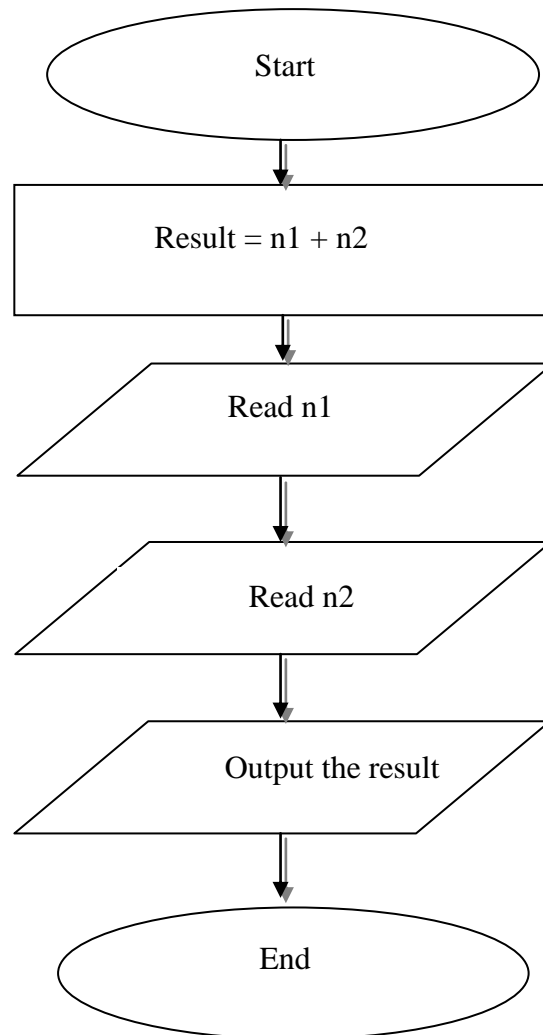
1. What is the definition of a problem?
2. How to solve problems?
3. What is meant by Algorithm?
4. What is a Program testing?
5. What is Flowchart?
6. Define Visual Basic.NET?
7. Define programming language?

8. . Complete:

Shapes					
Shapes' name	Process	Flow line
Function	Start & End	Used to input & output	Choose events & condition of answer Yes & No



9. . Correct the flowchart which represents adding two numbers:





10. The figure show chart for calculating the area and circumference for a circle given the radius of the circle R:

$$A = 3.14 * R * R$$

$$C = 2 * 3.14 * R$$

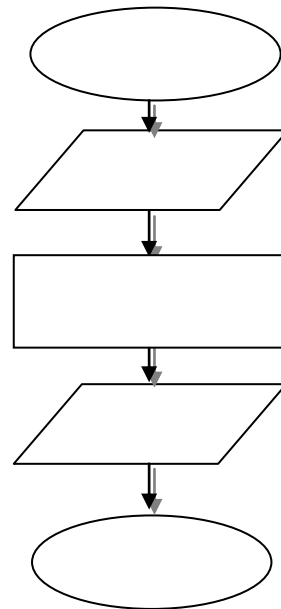
START

END

OUTPUT A

OUTPUT C

READ R



11. The figure show chart for calculating the interest value for balance with fixed interest rate.

$$\text{Interest} = \text{balance} * \text{rate}$$

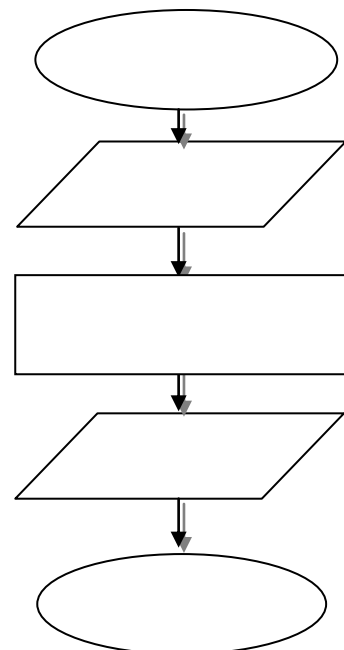
END

Read name, balance, rate

Output

Name, balance, interest

Start





12- - ***Draw a flowchart for a program that will obtain exam scores from the user. Determine whether the score is greater than or equal 50 and display the message***

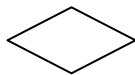
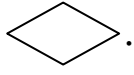
”ناجح.”

13-Make the following statements in order:

- () Program Testing.
- () Performing step-by-step instructions (Algorithm).
- () Problem Definition.
- () Program Documentation.
- () Program design.



14-State whether the following statements are true (✓) or false (X) :

1. Flowcharts use symbols and lines with arrows to represent an Algorithm. ()
2. You can use any Geometric shape to represent Algorithms when drawing flowcharts. ()
3. Flowcharts can be drawn using software only and can't be drawn on paper. ()
4. The flow of steps will always be from top to bottom or from left to right. ()
5. The rectangle symbol represents only on processing operation. ()
6. The flow of steps will always be from top to bottom or from left to right. ()
7. The symbol  is used when a question has more than one Alternative. ()
8. Two paths (lines) should come out from the diamond . ()
9. The line with an arrow (flow line) should be from left to right or from top to bottom. ()
10. The (Algorithm) is the first stage of Problem Solving. ()



Answers

1. What is the definition of a problem?

The problem is defined as the objective or the specific output that we want to attain; through a sequence of steps and activities and, specific input.

2. How to solve problems?

- Problem Definition.
- Perform Algorithm.
- Program design.
- Program Testing.
- Program documentation.

3. What is meant by Algorithm?

is defined as group of logically arranged procedures to be executed to attain a goal.(Flow Chart)

4. What is a Program testing?

Detecting errors and correct them.

5. What is Flowchart?




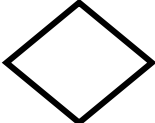
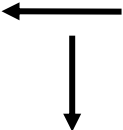
Flowchart is a diagram that uses standard graphical symbol to make the steps required to solve problem.



6- visual Basic.net is just one of the languages in visual studio.net package that includes other languages ,such as c# and j#.

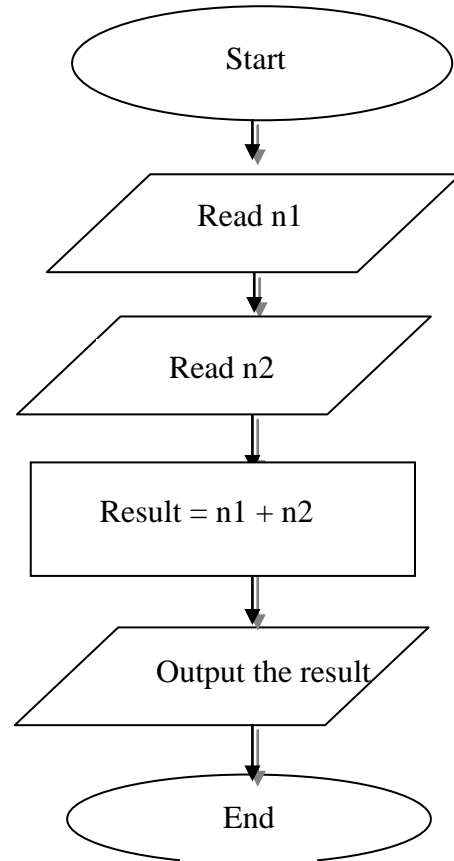
7- programming languages is a set of rules symbols and special words you can use to write instructions to make a computer program.

8- Complete:

Shapes					
Shapes' name	Terminal	Input / output Read / Print	Process	Decision	Flow line
Function	Start & End	Used to input & output	Input the arithmetic process	Choose events & condition of answer Yes & No	Communica tion lines of the flowchart



9- Correct the flowchart which represents adding two numbers:





10- The figure show chart for calculating the area and circumference for a circle given the radius of the circle R:

$$A=3.14*R*R$$

$$C=2*3.14*R$$

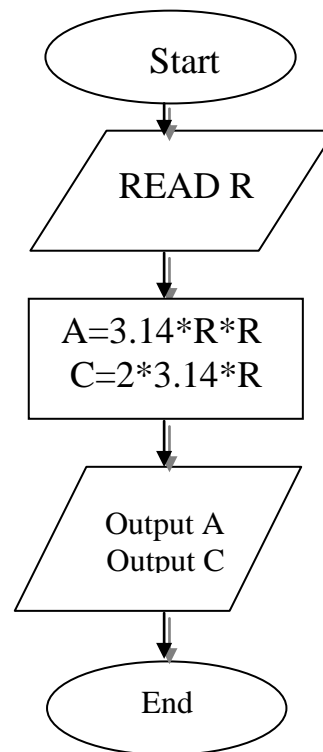
START

END

OUTPUT A

OUTPUT C

READ R



11.The figure show chart for calculating the interest value for balance with fixed interest rate.

$$\text{Interest} = \text{balance} * \text{rate}$$

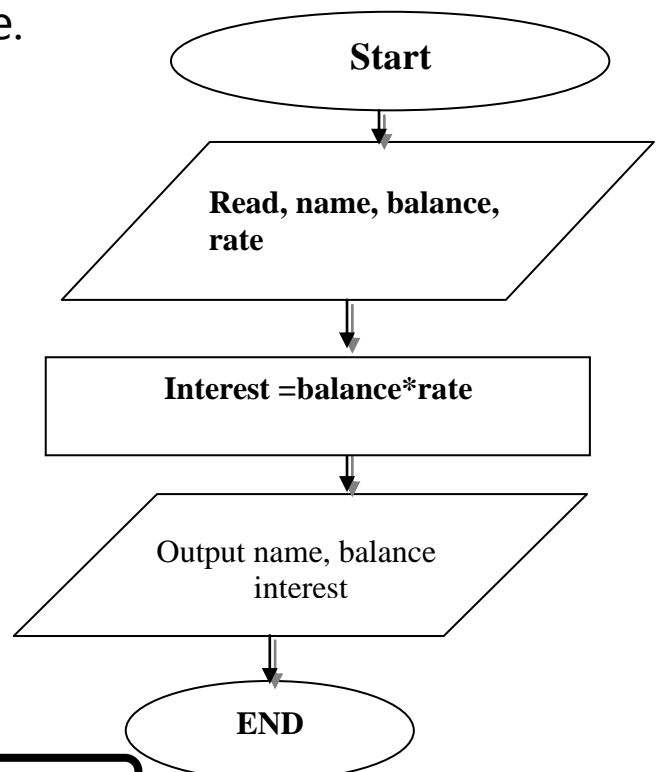
END

Read name, balance, rate

Output

Name, balance, interest

Start





12- - **Draw a flowchart for a program that will obtain exam scores from the user. Determine whether the score is greater than or equal 50 and display the message**

”ناجح”.

First: Define the Problem.

Output: Print the word “ناجح”.

Input: The score X.

Solution: If the value of X is greater than or equal 50; the word “ناجح” will be printed.


Algorithm	Flowchart
1-Start 2- Enter the values of X 3- If $X \geq 50$ then 3-1 Print “ناجح” 4- End	<pre> graph TD Start([Start]) --> EnterX[/Enter X/] EnterX --> Decision{X >= 50} Decision -- Yes --> Print[/Print "ناجح"/] Print --> End([End]) Decision -- No --> End </pre>



13-Make the following statements in order:

- (4) Program Testing.
- (2) Performing step-by-step instructions (Algorithm).
- (1) Problem Definition.
- (5) Program Documentation.
- (3) Program design.

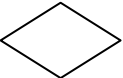
14-State whether the following statements are true (√) or false (X)

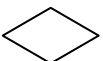
1. Flowcharts use symbols and lines with arrows to represent an Algorithm. (√)
2. You can use any Geometric shape to represent Algorithms when drawing flowcharts. (X)
3. Flowcharts can be drawn using software only and can't be drawn on paper. (X)
4. The symbol  is used to represent both the start and the end. (√)
5. The rectangle symbol represents only on processing operation. (X)

Computer Net Revision



6. The flow of steps will always be from top to bottom or from left to right. (✓)

7. The symbol  is used when a question has more than one Alternative. (✓)

8. Two paths (lines) should come out from the diamond . (✓)

9. The line with an arrow (flow line) should be from left to right or from top to bottom. (X)

10. The (Algorithm) is the first stage of Problem Solving. (X)